L5 2 CYTODEX(W) 3(W) MICRO(W) CARRIERS

=> D L5 BIB TI SO AU ABS 1-2

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2001 ACS
AN 2000:766138 CAPLUS
TI Quick way in isolation and amplification of mandibular condylar cartilage cell in vitro
AU Jiao, Yantao; Ma, Xuchen; Yu, Shifeng; Zhang, Zhenkang; Shao, Manjun
CS Department of Radiology, School of Stomatology, Beijing Medical University, Beijing, 100081, Peop. Rep. China
SO Zhonghua Kouqiang Yixue Zazhi (2000), 35(4), 254-255
CODEN: ZKYZE2; ISSN: 1002-0098
PB Zhonghua Yixuehui
DT Journal
LA Chinese
TI Quick way in isolation and amplification of mandibular condylar cartilage cell in vitro
SO Zhonghua Kouqiang Yixue Zazhi (2000), 35(4), 254-255
CODEN: ZKYZE2; ISSN: 1002-0098
AU Jiao, Yantao; Ma, Xuchen; Yu, Shifeng; Zhang, Zhenkang; Shao, Manjun
AB A quick way in acquiring well differentiated mandibular condylar cartilage
(MCC) cells with high viability in large scale was established. Japan white rabbit MCC cells were harvested by enzymic method. They were grown in a modified bioreactor culture system, which contained the **cytodex-3 micro-carriers** in the
culture medium. Kinetic growth of MCC cells on DEAE-dextran micro-carrier
was obsd. under phase contrast microscope and environmental scanning microscope resp. MCC cells attached rapidly to the surface of micro-carriers, but their spreading was slow. A quick growth of these cells was obsd. when they fully spread onto the micro-carrier. The no. of
MCC cells increased 16.2 times compared with that of plating. Micro-carrier culture of MCC cells can yield a large quantity of cells within a short period of time that will be of benefit in banking MCC cells
for reconstruction of impaired cartilage.

L5 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1984:321289 BIOSIS
DN BA78:57769
TI PRODUCTION OF NERVE GROWTH STIMULATING FACTORS FROM CHICK EMBRYO HEART CELLS USE OF **CYTODEX 3 MICRO** **CARRIERS** AND SERUM-FREE MEDIA.
AU NORRGREN G; EBENDAL T; WIKSTROM H
CS UPPSALA UNIV., DEP. ZOOL., 75122 UPPSALA, SWEDEN.
SO EXP CELL RES, (1984) 152 (2), 427-435.
CODEN: ECREAL. ISSN: 0014-4827.
FS BA; OLD
LA English
TI PRODUCTION OF NERVE GROWTH STIMULATING FACTORS FROM CHICK EMBRYO HEART CELLS USE OF **CYTODEX 3 MICRO** **CARRIERS** AND SERUM-FREE MEDIA.
SO EXP CELL RES, (1984) 152 (2), 427-435.
CODEN: ECREAL. ISSN: 0014-4827.
AU NORRGREN G; EBENDAL T; WIKSTROM H
AB Medium conditioned by embryonic chick heart cells is known to support

extensive neurite outgrowth from autonomic and sensory neurons. Here, the use of microcarrier cell culture with serum-free media to scale up the production of the nerve growth-stimulating factors is described. A growth medium composed of DME/F10 supplemented with insulin, transferrin, human serum albumin and fibronectin in combination with a low MW fraction of fetal calf serum (FCS) or a mixture of FGF, dexamethasone, calmodulin and thrombin supported the heart cell proliferation at a rate similar to that of medium with 10% FCS. The level of successively accumulated nerve growth activity measured in a bioassay with sympathetic ganglia was nearly equivalent to what was obtained when cells were grown in medium containing serum. Results confirm the potential of microcarrier cell culture in serum-free media for the production and subsequent recover of a specific

L4 ANSWER 16 OF 29 CAPLUS COPYRIGHT 2001 ACS
AN 1993:624458 CAPLUS
DN 119:224458
TI Positively charged microcarriers for culturing adhesive animal cells
IN Ito, Takeshi; Kubota, Hirohisa
PA Mitsubishi Chem Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05207873	A2	19930820	JP 1992-12322	19920127

TI Positively charged microcarriers for culturing adhesive animal cells
IN Ito, Takeshi; Kubota, Hirohisa
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

AB **Micro-carriers** contg. pos. charged groups are used for culturing adhesive animal cells in serum-free medium in the absence of adhesive factors (e.g. fibronectin and laminin) for secretory proteins and vaccine prodn. The **micro-carriers** are pos. charged acrylate or methacrylate esters, dextran, or cellulose. Cytodex 1 **micro-carriers** was used and the rate of cell attachment was studied.

L4 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2001 ACS
AN 1998:211463 CAPLUS
DN 128:307261
TI Bioreactor reproduction of vaccine strains of poliovirus during their pseudosubmerged cultivation
AU Mironova, L. L.; Popova, V. D.; Konyushko, O. I.; Khapchaev, Yu. Kh.; Okhota, M. F.; Lashkevich, V. A.
CS Inst. Poliomielita Virusn. Entsefalitov im. Chumakova, RAMN, Moscow, Russia
SO Biotekhnologiya (1997), (6), 60-62
CODEN: BTKNEZ; ISSN: 0234-2758
PB Biotekhnologicheskaya Akademiya RF
DT Journal
LA Russian
TI Bioreactor reproduction of vaccine strains of poliovirus during their pseudosubmerged cultivation
AU Mironova, L. L.; Popova, V. D.; Konyushko, O. I.; Khapchaev, Yu. Kh.; Okhota, M. F.; Lashkevich, V. A.
SO Biotekhnologiya (1997), (6), 60-62
CODEN: BTKNEZ; ISSN: 0234-2758
AB Data are presented on the reprodn. of the vaccine strains of poliovirus in order to obtain three types monovaccine using the interwoven cell lines which multiply on **micro carriers** in different types of reactors.

L4 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2001 ACS
AN 1998:772052 CAPLUS
DN 130:80419
TI Production of reovirus type-1 and type-3 from Vero cells grown on solid and macroporous microcarriers
AU Berry, J. M.; Barnabe, N.; Coombs, K. M.; Butler, M.
CS Departments of Microbiology, University of Manitoba, Winnipeg, MB, Can.
SO Biotechnol. Bioeng. (1999), 62(1), 12-19
CODEN: BIBIAU; ISSN: 0006-3592
PB John Wiley & Sons, Inc.
DT Journal
LA English
TI Production of reovirus type-1 and type-3 from Vero cells grown on solid and macroporous microcarriers
AU Berry, J. M.; Barnabe, N.; Coombs, K. M.; Butler, M.
SO Biotechnol. Bioeng. (1999), 62(1), 12-19
CODEN: BIBIAU; ISSN: 0006-3592
AB Two strains of reovirus were propagated in Vero cells grown in stationary or microcarriers cultures. Vero cells grown as monolayers on T-flasks or in spinner cultures of Cytodex-1 or Cultispher-G microcarriers could be infected with reovirus serotype 1, strain Lang (T1L), and serotype 3, strain Dearing (T3D). A regime of intermittent low speed stirring at reduced culture vol. was crit. to ensure viral infection of cells in microcarrier cultures. The virus titer increased by 3 to 4 orders of magnitude over a culture period of 150 h. Titers of the T3D reovirus strain were higher (43%) compared to those of the T1L strain in all cultures. Titers were significantly higher in T-flask and Cytodex-1 microcarrier cultures compared to Cultispher-G cultures with respect to either reovirus type. The viral productivity in the microcarrier cultures was dependent upon the multiplicity of infection (MOI) and the cell/bead ratio at the point of infection. A combination of high MOI (5 pfu/cell) and high cell/bead loading (>400 for Cytodex-1 and >1000 for Cultispher-G) resulted in a low virus productivity per cell. However, at low MOI (0.5 pfu/cell) the virus productivity per cell was significantly higher at high cell/bead loading in cultures of either microcarrier type. The max. virus titer (8.5 x 109 pfu/mL) was obtained in Cytodex-1 cultures with a low MOI (0.5 pfu/cell) and a cell/bead loading of 1000. The virus productivity per cell in these cultures was 4000 pfu/cell. The lower viral yield in the Cultispher-G **micro-carrier** cultures is attributed to a decreased accessibility of the entrapped cells to viral infection. The high viral productivity from the Vero cells in Cytodex-1 cultures suggests that this is a suitable system for the development of a vaccine prodn. system for the Reoviridae viruses.
RE.CNT 29
RE
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